

0 **WHAT IS CLAIMED IS**
A **CLAIMS:**

1. A method of controlling communication between user stations
using a mobile communications system having a radio interface, said method
5 comprising:

providing a data packet handler connected to a packet data network;

holding control data, indicating a state of a call between a first user
station and a second user station;

10 dynamically assigning radio resources for the transfer of data packets
carrying call data for said call over said radio interface, such that the amount
of radio resources assigned varies in accordance with the amount of call data
to be transferred at different points in said call; and

controlling the transfer of data packets between said first and second
user stations, using said data packet handler, in accordance with said control
15 data.

2. A method according to claim 1, wherein said control data
indicates the existence of said call.

20 3. A method according to claim 1 or 2, wherein said control data
indicates identities of the participants in said call.

4. A method according to claim 1, 2 or 3, wherein said control data indicates the seizure of said call by a user station.

5. A method according to any preceding claim, comprising
5 receiving a call setup request from said first user station at said packet handler, and transmitting a call setup confirmation message to said first user station.

10 6. A method according to claim 5, comprising transmitting a call setup message to said second user station from said packet handler, and transmitting said call setup confirmation message after an acknowledgement is received from said second user station.

15 7. A method according to any preceding claim, comprising accessing a data store from said packet handler to determine an address of said second user station in order to address data packets to be transmitted thereto.

20 8. A method according to any preceding claim, comprising seizure of said call by said first user station.

9. A method according to claim 8 comprising controlling said transfer to prevent the transfer of data packets to said first user station when said first user station has seized the call.

10. A method according to claim 8 or 9, comprising granting call seizure to said second user station when said first user station no longer has seizure of the call.

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11. A method according to any preceding claim, comprising copying data packets received from said first user station, for transmission to a plurality of call participant user stations including said second user station.

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12. A method according to any preceding claim, wherein said control data is held in a data store accessible by said data packet handler.

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13. A method according to any preceding claim, wherein said mobile communications system is a GSM-type mobile communications system, said method comprising:

receiving data packets at said data packet handler from a first user station via a GPRS data link.

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14. A method according to any preceding claim, wherein said mobile communications system is a GSM-type mobile communications system, said method comprising:

transmitting data packets from said data packet handler to a second user station via a GPRS data link.

15. A method according to claim 13 or 14, wherein said data packet handler is connected to a GPRS support node.

5 16. A method of handling the transfer of data in a GSM-type mobile communications system, said method comprising:

receiving a first data packet from a first user station, said first data packet containing a recipient ID;

mapping said recipient ID to a packet network protocol address
10 whereby routing to a second user station is identified by a gateway GPRS support node; and

transmitting a second data packet to said gateway GPRS support node, said second data packet containing said packet network protocol address.

15 17. A method according to any preceding claim, wherein said data packets comprise voice data.

18. A method according to any preceding claim, wherein said data packets comprise still or video image data.

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19. A data packet handler adapted to perform the data packet handling functions in the method of any preceding claim.

20. A mobile station adapted to communicate with the data packet handler of claim 19, said mobile station comprising:

means for dynamically requesting resources for the transmission of data packets carrying call data over said radio interface, such that the amount of radio resources requested varies in accordance with the amount of call data
5 to be transmitted at different points in said call; and

means for transmitting and receiving control data packets to and from said data packet handler to signal call-related control functions.

10 21. A method of conducting communications between user stations using a mobile communications system, each said user station comprising a camera for picking up an image of the user and a display for displaying an image of a remote party, said method comprising establishing a data transfer connection between said user stations, and controlling said connection in a
15 half-duplex mode such that a user station may perform one of either only receiving or only transmitting image data for a first period sufficient to receive or transmit image data forming an image, and perform the other of only receiving or only transmitting video image data for a second period following said first period and sufficient to transmit or receive image data
20 forming an image.

22. A method according to claim 21, wherein the image data transmitted and received during the first and second periods forms a complete image of the user or a remote party.

5 23. A method according to claim 21 or 22, wherein said image data comprises video image data, and wherein the length of the period of transmission is variable by the user of the user station.

10 24. A mobile station adapted to conduct video image communications, said mobile terminal having a half-duplex communications mode controlled by a data processor which in that mode prevents the transmission of video image data during the reception of video image data and which allows the transmission of video image data during a period selected by a user.

15 25. A mobile station in accordance with claim 24, wherein said period is selected by the actuation by the user of a switch on said mobile station.

20 26. A mobile station according to claim 25, wherein said selected period is defined by a period for which said switch is manually held by the user.

27. A mobile station according to claim 25 or 26, comprising a data store for storing a group identifier for transmission in association with the video image data, to enable the video image data to be transmitted to a plurality of recipient user stations.

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28. A mobile communications station having a group dispatch mode of operation, said station comprising a camera for image data capture and means for transmitting said image data in said group dispatch mode.

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29. A method of controlling communication between user stations using a GSM-type mobile communications system, said method comprising:

providing a data packet handler connected to a GPRS support node;

holding control data, indicating a state of a call between a first user station and a second user station, in a data store accessible by said data packet

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handler; and

controlling the transfer of data packets between said first and second user stations via a GPRS data link, using said data packet handler, in accordance with said control data.

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